









# PEARL CULTURE IN JAPAN

Among the many wonders of the orient there is none more interesting than culture pearls.

These gems of the sea should not be confused with the so-called artificial pearls for they are true pearls in every sense of the word. The pearl-bearing oyster is made to produce pearls by a scientific process in four years.

In early times people had all kinds of ridiculous and extravagant ideas about the way in which pearls were produced. Even so learned a man as Pliny believed that they were drops of dew, which, falling into the gaping mouth of the mollusc, were transformed by the animal's power, into pearls.

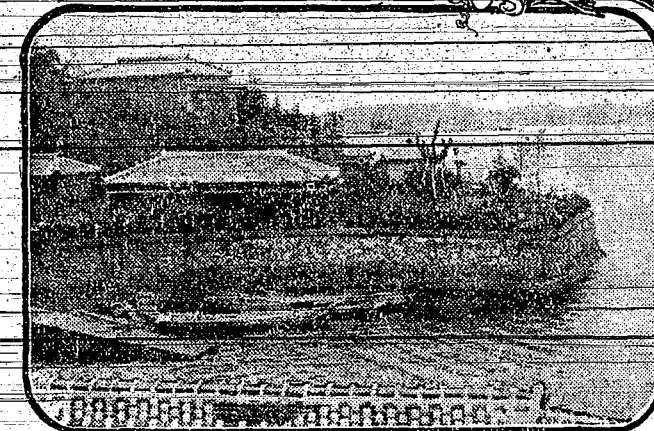
From Aeschylus' song in "The Persians":

Full fathom five thy father lies:  
Of his bones are coral made;  
Those are pearls that were his eyes:  
Nothing of him that doth fade.

INSPECTING THE OYSTER BEDS BY WOMEN DIVERS



WOMEN DIVERS AT REST



WOMEN DIVERS AT WORK

"ATFORD" ISLAND, THE MIKIMOTO PEARL CULTURE STATION

But sometimes it was changed into something rich and strange.

We see that in Shakespeare's time men had peculiar notions about the wonders wrought by the animals of the sea. Again, in Moore's poem, "The Pearl," we find:

And precious the tear as that rain from the sky  
Which turns into pearls as it falls in the sea.

Kellan thought that pearls were produced by lightning flashing into the open shells.

Turning from these fantastic, though interesting, theories let us glance at the modern explanations of the formation of these beautiful products of nature.

You have, no doubt, often seen shells of molluscs lined with a smooth and iridescent coating which is called nacre or mother-of-pearl. This coating, like the rest of the shell, is produced by the animal and is made up mostly of carbonate of lime and an organic matrix which usually presents a laminated texture. You must have noticed that the color and brilliancy of this layer differ in various species of shells. For instance, in the ordinary oyster it is of a lustreless white, and in a kind of shell called abalone or ear shell (Haliotis), the nacre is of a greenish blue tinge, changing to purple as you turn it in your hand. In another kind, known as the black-lipped shell, (Margaritifera), the mother-of-pearl is of a greenish black color. In the shells of the true pearl-oysters the nacre is of a clear, delicate white, which has the sheen of floss silk faintly tinged with azure, exhibiting a beautiful play of color—a quality which makes these shells of great value in commerce.

Now it often happens that foreign substances, such as sand grains, microscopic organisms of various kinds, parasitic worms, crabs, or sometimes even small fishes become introduced by accident or otherwise inside the shell or into the tissues of the mollusc's soft body. In such cases, the animal sometimes begins to deposit a part of the material which goes to form the nacreous layer of the shell around or over these foreign objects and as new material is added year after year in the form of layers these concretions become of considerable size. And when this takes place in a shell with specially beautiful nacre such as that of the pearl-oyster, the result may be an object of great beauty, prized from ancient times as a priceless jewel. In this strange way, pearls, the handsomest products of nature are produced. Such being their origin, pearls may be formed in any kind of mollusc, bivalved or univalved. And just as the nacre of different kinds of shells differs, so the pearls themselves vary according to the shell, which produces them. Thus the pearls of the common oyster, the scallop and the giant clam are milky white and not very bright, while those of the sea mussel are usually black.

Perhaps you have noticed that pearls are of many different shapes, some round, some pear-shaped, some egg-shaped and some of all manner of fantastic shapes. The round, pear-shaped and egg-shaped ones are known as oriental or virgin pearls, while those of irregular shapes are called baroque pearls. These are sometimes found in the shapes of fishes, birds, wings, or creeping worms. This seed pearls, which are generally used for medicinal purposes by the Chinese, are always very small and usually found together in numbers.

At the Third National Industrial exhibition, held in Tokyo in 1890, Mr. Mikimoto exhibited in the aquarium of fisheries section some living specimens of the pearl-oyster. This made him acquainted with Dr. Miksukuri, professor of zoology at the Imperial university, who first suggested to him the possibility of cultivating pearl-oysters and of making them produce pearls by the use of proper stimuli. Being deeply interested in the subject, Mikimoto went afterwards to the marine biological station of the Imperial university at Wakan, where the professor was teaching, and

Sometimes two pearls will be found joined together by the nacreous substance, thus forming what is known as "twins pearls."

All of these kinds of pearls are called free pearls, because they are found in the tissues of the animal's body and are not joined to the shell.

In the same way that two pearls are joined together, it sometimes happens that pearls are found attached to the inner surface of the shell. This position interferes with the symmetry of the pearl so that when it is taken out of the shell it is flat on one side, making what is known as a "pearl button."

The attached pearls are not always of inferior quality but are often highly valued. The world renowned "Southern Cross," which was valued at \$10,000 by the company to which it belonged was found at Cosack, Western Australia, attached to the central part of the inside of a shell.

When once the nature of pearls was understood, it was but natural that many experiments were made to produce the precious objects at will. In fact, much attention has been paid to this very problem by scientific men, and they are still at work upon it.

It is well known that Linnaeus, the father of natural history, claimed that pearls could be produced by piercing holes in the shell of an oyster with a fine auger, making a small wound, and afterwards "parking" the oysters for many years. But his suggestions do not seem to have been clearly understood and no one has been able to pursue his method successfully. The Chinese, as is well known, have been especially successful in raising pearls by inserting grains of clay between the shell and the thin outer membrane which covers the soft body of the freshwater mussel, but the best of these are of very inferior quality, and are valuable merely as curios.

At the International Fisheries exhibition, held in Berlin in 1890, some pearls were shown which had been cultivated in Germany. From looking at these one could see that the plain relief might be covered with nacreous substance, but the result was of little value. Mr. Saxelle, a French naturalist to the government of Queensland and to that of Western Australia, undertook the same experiment with the large pearl-oyster, and a gentleman on Thursday Island tried inserting a shot through a hole in the shell.

The most important of such experiments are probably those of Dr. Louis Boutan of Paris, who succeeded some seven years ago in producing pearls in the abalone shell. The public was naturally greatly interested, and the newspapers in France and elsewhere published his success and called it a great discovery.

It may perhaps come as a surprise to many that before Dr. Boutan's attempts, a very extensive and successful system of pearl-oyster cultivation had been carried on in Japan by a Mr. Mikimoto, and "culture pearls" had not only been produced, but placed regularly on the market. Even at the present day, it may be claimed that this is the only pearl-oyster farm in the world which undertakes the extensive cultivation of the precious mollusc and produces "culture pearls" on a commercial scale. An account of the successful enterprise may, therefore, be not wholly devoid of interest.

At the Third National Industrial exhibition, held in Tokyo in 1890, Mr. Mikimoto exhibited in the aquarium of fisheries section some living specimens of the pearl-oyster. This made him acquainted with Dr. Miksukuri, professor of zoology at the Imperial university, who first suggested to him the possibility of cultivating pearl-oysters and of making them produce pearls by the use of proper stimuli. Being deeply interested in the subject, Mikimoto went afterwards to the marine biological station of the Imperial university at Wakan, where the professor was teaching, and

At that concert with Count Zamoyaski, which had been given him, and his mother was one day about to destroy the instrument, but was prevented by Count Zamoyaski, who was observing the skill which the lad displayed. Six years later, in 1895, when twelve years of age, Huberman appeared at an Adeline Patti concert in Vienna, and his remarkable performance, then in the beginning of a series of engagements which has continued ever

since. His mother, who was present at that concert with Count Zamoyaski, shed tears of joy at his success, and gave an unqualified affirmative reply to the count's question, "Are you not glad that your son kept his violin?"

According to Brandislaw Huberman, Sir Edward Elgar is appreciated even more in Russia than he is in Britain. At his Queen's hall recital recently Huberman played a Capriccioso by that composer. The same item was placed upon his Russian programs on

## Stomach-Worms in Sheep and Calves

By WARD CUTNER, State Veterinarian, East Lansing, Michigan

The losses from stomach worms in sheep undoubtedly exceed the combined losses from all other causes which bring about death in sheep.

My attention has recently been called to stomach worms on account of finding them in a bunch of young cattle. This is the first time that I have seen this worm in calves in Michigan, but it is well known that in certain parts of the south it has caused enormous losses to bovines.

The losses of sheep, especially lambs, have been very serious during the past few years. I have seen as much as \$4,000 of loss within sight of one farm house. This loss usually indicates ignorance on the part of the owner as to the nature of sheep diseases. The experienced flock master does not suffer such losses, as a rule, since he knows the deadly character of this worm and plans from year to year in order to fight its ravages.

The stomach worm, technically known as *Haemonchus contortus*, is a minute worm about an inch in length when mature, and derives its name, contortus, from its appearance, which suggests a very long, twisted thread. The brownish color has a very dire significance. It is due to blood pigments. The worm is found in enormous numbers in the sick lamb or calf in the fourth or true stomach, which is properly called the abomasum. This stomach is the one of which the small intestine is a continuation. The worms may be found frequently in that portion of the small intestine attached to the fourth stomach. The diagnosis at post-mortem, then, is made by opening the true stomach and examining carefully in a good light the living membrane of this organ. If the animal has just died, or just been killed, these worms will be found in a seething mass. In some cases, covering the membrane.

These worms themselves, at least ten months, to the membrane and withdraw blood. This requires an irritation of the lining of the stomach and in a depletion of the system from blood withdrawal. There may be no signs secreted, also, but this cannot be definitely stated. It is quite noticeable that when the animal has bled to death, the quantity of blood is quite small. The young lamb, which is especially susceptible to the ravages of this worm, usually stays apart from the flock and dies very easily. The appetite is lost, the animal appears thin and weak. Usually in the lower jaw there is a tough swelling. This swelling may exist between the front legs, also, and is due to the bloodless condition of the lamb. The mucous membrane of the eye and mouth become very pale, although it is sometimes brownish in color. Lambs may cough when affected with stomach worms, but the cough is very apt to be due to a complication due to the lung worm.

The lung worm is very apt to be found on the same pastures that are infested with the stomach worm. The lung worm is considerably larger than the stomach worm, and pearly white in color. It can be found by making an incision through the lung and pressing out the contents of the affected bronchial tubes.

The season is now beginning for these worms to be serious, and we wish to call attention to the means whereby their ravages may be avoided, at least to a degree. The life history of these worms is not fully understood, but we know that they lay enormous numbers of minute eggs. The embryo or young worm hatched from these eggs is picked up from the grass or water by the sheep or young cattle, and enters the stomach to start the irritating process which we have described. It can be readily understood that a permanent pasture, and especially one that has low, wet places in it, will be most liable to infestation. We do not see how a permanent pasture can be used for sheep or young cattle when these worms have once been introduced. The eggs undoubtedly live through the winter and are ready to infect the lambs when turned out in the spring. In view of this fact, we would recommend that the farmer contemplate some method whereby he can maintain a rotation of pastures and before turning out young stock on the spring pasture, if there is any possibility that they are affected with stomach worms, treat them in a manner to destroy the worms before they enter the pastures.

The whole idea of the treatment is to separate the worm from the lamb or calf, and starve out the worm, which probably cannot live for more than a year in the absence of some such animal host. We would recommend that the treatment be conducted as follows:

Place the animals to be treated in a small enclosure free from all litter; give them nothing but water for 24 hours; salt sprinkled with turpentine can be kept before them all the time.

## THE SIGN BOARD NUISANCE

By R. J. BALDWIN, Michigan Agricultural College

About the most needless disfigurement of our public highways are the billboards and posters which are seen in the most conspicuous places along the main roads leading from our towns and cities. Fences, buildings, and trees are used alike and nothing is good enough to escape the assault of the man with paint and paste brushes, and gaudy colored posters. It is not an uncommon thing to see the whole side of a building covered with an advertisement or fantastic pictures which appeal completely to the eye of the passing traveler. The native trees that add so much beauty to Michigan's country roads are marred with signs nailed to their trunks and the eye is forced to be distracted by the display of "Boots & Shoes," "Dry Goods & Groceries," or

some new brand of tobacco. Such things are necessarily offensive to all who use the country roads and are of questionable value to the persons or companies who attempt to advertise in this way.

Much has been done in all parts of America by "Civic Improvement Associations," to create a sentiment against the use of signboards in places where they are offensive and the effort ought to be continued especially by the owners of property bordering on main roads.

If such signs have been placed on your fences or trees without your permission it is your privilege and should be your interest to have them removed. If you are a merchant or tradesman in town it is your duty to signpost your business as much as they detract from the appearance of the farms. If you are a business man in town you ought to have enough consideration for those who appreciate the natural beauty of Michigan's highways to refrain from placing your signs where they will be a constant offense to the eye.

The treatment may be preceded by laxative, or castor oil, after fasting for 24 hours, give them one half to one ounce of turpentine in from one pint to one quart of fresh skim milk. On the following day, if it has not previously been given, and after 24 hours, they may be removed to the pasture. Where the stomach worm has been a serious menace, it would be well to plan on having four pastures.

Remove in the spring, after the above-described treatment, just before the first of July, repeat the treatment, and remove to pasture IV, or to a lot where they may remain until the following March; in March, or as soon as possible, remove to pasture IV, and on July 1st to pasture I again, and so on repeating in this order.

After this, the treatment should be only in the fall of the year; just before entering the pasture or enclosure for the winter. Lambs that show signs of infestation with worms should be removed and treated separately. Avoid stocking the pastures too heavily, keep salt before the animals all the time, and avoid low wet pastures. Animals that die should be burned up, if possible, otherwise buried very deeply.

It may be of great value to know that it is quite without danger in use as a pasture for other animals than the ruminants, such as cattle, sheep and goats. It will be perfectly safe to pasture colts or hogs on these badly infested pastures, and where no other use can be found we would recommend this procedure.

The writer will be glad to communicate with any farmers that suspect stomach worms in their stock.

## HOW TO ERADICATE COMMON BURDOCK

By R. J. Baldwin

One of the rankest-growing and most disagreeable weeds in Michigan is the common burdock (*Achillea Millefolium*). It is not a bad weed in cultivated fields, and usually disappears from land on which a crop rotation is practiced. In cultivated places, such as old pastures, roadsides, fence corners, orchards and cut over timber lands are places which favor the growth of burdock, and in such places they become a very great nuisance where farm animals, especially sheep, come in contact with the weeds. Simply because it is so



Common Burdock.

weed to be feared in field crops burdocks are often allowed to grow in unused corners, but they are unsightly and are liable to be taken as an indication of lack of thrift and careless farming.

The burdock is a biennial, and can be killed by cutting below the ground. If cut sufficiently low with a heavy mattock or spade that is about the only way to deal with them in places that are not cultivated for farm crops.

The accompanying cut, which is taken from Michigan Experiment Station Bulletin No. 267, shows the characteristics of the plant and seed.

To Control Chicken Lice.

Provision should be made for a dust bath in every chicken house for the problem of dealing with lice is greatly reduced by its presence. The objection that it creates dust is greatly overcome by its beneficial features and a closed bath with a special window in the south side and accessible by a small opening can be easily constructed which has an additional advantage in that it is comparatively free from the danger of any dirt or litter accumulating from the pen. Fine road dust, finely sifted coal ashes, etc., are very desirable materials for the dust bath, and the addition of lime, tobacco dust and patent preparations tend to make it more effective.

some new brand of tobacco. Such things are necessarily offensive to all who use the country roads and are of questionable value to the persons or companies who attempt to advertise in this way.

Much has been done in all parts of America by "Civic Improvement Associations," to create a sentiment against the use of signboards in places where they are offensive and the effort ought to be continued especially by the owners of property bordering on main roads.

If such signs have been placed on your fences or trees without your permission it is your privilege and should be your interest to have them removed. If you are a merchant or tradesman in town it is your duty to signpost your business as much as they detract from the appearance of the farms. If you are a business man in town you ought to have enough consideration for those who appreciate the natural beauty of Michigan's highways to refrain from placing your signs where they will be a constant offense to the eye.

Some new brand of tobacco. Such things are necessarily offensive to all who use the country roads and are of questionable value to the persons or companies who attempt to advertise in this way.

Much has been done in all parts of America by "Civic Improvement Associations," to create a sentiment against the use of signboards in places where they are offensive and the effort ought to be continued especially by the owners of property bordering on main roads.

If such signs have been placed on your fences or trees without your permission it is your privilege and should be your interest to have them removed. If you are a merchant or tradesman in town it is your duty to signpost your business as much as they detract from the appearance of the farms. If you are a business man in town you ought to have enough consideration for those who appreciate the natural beauty of Michigan's highways to refrain from placing your signs where they will be a constant offense to the eye.

Some new brand of tobacco. Such things are necessarily offensive to all who use the country roads and are of questionable value to the persons or companies who attempt to advertise in this way.

Much has been done in all parts of America by "Civic Improvement Associations," to create a sentiment against the use of signboards in places where they are offensive and the effort ought to be continued especially by the owners of property bordering on main roads.

If such signs have been placed on your fences or trees without your permission it is your privilege and should be your interest to have them removed. If you are a merchant or tradesman in town it is your duty to signpost your business as much as they detract from the appearance of the farms. If you are a business man in town you ought to have enough consideration for those who appreciate the natural beauty of Michigan's highways to refrain from placing your signs where they will be a constant offense to the eye.

Couldn't Happen to Them.

Mike got a job moving some bags of powder, and to the alarm of his foreman, was discovered smoking at his work.

"Job-a-lum!" exclaimed the foreman. "Do you know what happened when a man smoked at this job some years ago? There was an explosion that blew up a dozen men."

"That couldn't happen here," returned Mike calmly.

"Why not?"

"Cause there's only you and me," was the reply. "Everybody's Magazine."

Hands Cracked and Bled

St. Clair, Mo.—"My trouble began about fifteen years ago. It was what some called eczema. The form the disease worked under was a breaking out with watery blisters on my hands which would then dry and scale, and then would follow the trouble of cracking and bleeding, also itching and hurting. My hands were disfigured at the time, and sore. The trouble was very annoying, and disturbed my sleep. This last February it was ever so much worse than before. I did not do all my work on account of the condition of my hands. I could not put them in water without making them worse. I tried a lot of home remedies, also salves and liniments that claimed to be a cure for the trouble, but I did not obtain a cure."

"At last I saw the advertisement for Cuticura Soap and Ointment. I sent for a sample. I thought they would cure so I sent for a fifty-cent box of Cuticura Ointment and some Cuticura Soap. A doctor advised me to keep ahead with the Cuticura Soap and Ointment and they cured me completely. No trace of the trouble remains." (Signed) Mrs. Mary Taylor, Mar. 29, 1912.

Cuticura Soap and Ointment sold throughout the world. Sample of each free, with 32p. Skin Book. Address post-card "Cuticura, Dept. L, Boston."

There isn't much doing in the self-love line when a man loves himself as he does his neighbors.

YOU CAN CURE CATARRH

By using Colson's Carbolic Acid—It is a most effective remedy. All druggists, 25 and 50c.

After Dark.

"Honest as the day is long, eh?"

"Absolutely. But you'd better keep your chicken coop locked."

Don't let water get bluing. Liquid blue is almost all water. Buy Red Cross Ball Blue the blue that's all blue.

Easy.

"I put the wrong needles together in this machine and I don't know what to do about my mistakes."

Why repair them?

Mrs. Winslow's Sore Throat Syrup for Children. Sore throat, swollen glands, reduces inflammation, allays pain, cures croup, 10c a bottle.

The Marvel of It.

"There is one thing in life which always struck me as queer."

What is that?

"While so few are successful in looking for an opening, almost every one can find himself in a hole."

Too Much of a Good Thing.

"I was very happy," said the professor, "when after years of working she finally said 'Yes.'"

"But why did you break the engagement so soon after?" asked his friend.

"Man, it was she that dissolved it."

"Really?" said his friend. "How did that happen?"

"It was due to my accused absent-mindedness. When a few days later, I called at her home, I again asked her to marry me."

Sparrow Sets House Ablaze.

An English sparrow was the cause of three houses catching fire at Lawrenceburg, Ind., recently, and had it not been for the prompt work of the neighbors and friends all would have been destroyed. The sparrow was building a nest under the eaves of the home of Mrs. Mary Webber, and it picked up a long cotton string from a pile of rubbish that had just been burned. With the burning string in its beak, the sparrow flew to the roof of Mrs. Sophia Shaffer's house, then to Otto McCright's house and then to the roof of Emanuel Wuest's house, where it dropped the burning string. A fire started in the shingles of each building. Each was extinguished by neighbors before much damage was done.

## THE WAY OUT

Change of Food Brings Success and Happiness

An ambitious but delicate girl, after failing to go through school on account of nervousness and hysteria, found in Grape-Nuts the only thing that seemed to build her up and furnish her the peace of health.

"From infancy," she says, "I have not been strong. Being ambitious to learn any cost finally got to the high school, but soon had to abandon my studies on account of nervous prostration and hysteria."

"My food did not agree with me, I grew thin and despondent. I could not enjoy the simplest social affair for I suffered constantly from nervousness in spite of all sorts of medicines."

"This wretched condition continued until I was twenty-five, when I became interested in the letters of those who had cases like mine and who were getting well by eating Grape-Nuts."

"I had little faith, but procured a box and after the first dish experienced a peculiar satisfied feeling that I had never gained from any ordinary food. I slept and rested better that night and in a few days began to grow stronger."

"I had a new feeling and peace and restfulness. In a few weeks, to my great joy, the headaches and nervousness left me and life became bright and hopeful. I resumed my studies and later taught ten months with ease of course using Grape-Nuts every day. It is now four years since I began to use Grape-Nuts. I am the mistress of a happy home, and the old weakness has never returned." Name given by the Postum Co., Battle Creek, Mich.

"There's a reason." Read the Little Book, "The Road to Wellville," in page. Ever read the above letters? A new one appears from time to time. They are positive, true, and full of human interest.

## SON NOW FAMOUS VIOLINIST

Mother Recognizes Mistake Made in Effort to Check the Bent of His Genius.

The career of Bronislaw Huberman, the famous Warsaw violinist, who has been delighting London audiences recently, was nearly nipped in the bud by his mother. When a little boy of six years of age he devoted all his spare time to practicing on a violin

which had been given him, and his mother was one day about to destroy the instrument, but was prevented by Count Zamoyaski, who was observing the skill which the lad displayed. Six years later, in 1895, when twelve years of age, Huberman appeared at an Adeline Patti concert in Vienna, and his remarkable performance, then in the beginning of a series of engagements which has continued ever

since. His mother, who was present at that concert with Count Zamoyaski, shed tears of joy at his success, and gave an unqualified affirmative reply to the count's question, "Are you not glad that your son kept his violin?"

According to Brandislaw Huberman, Sir Edward Elgar is appreciated even more in Russia than he is in Britain. At his Queen's hall recital recently Huberman played a Capriccioso by that composer. The same item was placed upon his Russian programs on







## This is the Comb to buy

WE GUARANTEE EVERY COMB. WE HAVE THEM IN ALL THE DIFFERENT STYLES, WILL BE GLAD TO SHOW YOU—CALL IN AND SEE US.

A. M. LEWIS & CO.

## Crawford Avalanche.

GRAYLING, THURSDAY, AUG. 29

### Local and Neighborhood News.

Phone No. 5 for auto livery. H. A. Pond.

Mr. Green and family spent Sunday at Lovell's visiting friends.

Miss Clara J. Peterson is now at work in H. Peterson's grocery store.

Miss Mary Forbush of Fredric spent a day with her sister here last week.

Mrs. Paul Ziebell who was visiting at Harbor Beach returned home last Thursday.

Mr. and Mrs. E. Carpenter, of Lewiston, is visiting at the home of J. Armstrong.

Mr. Dunn and son of Johannesburg, passed through Grayling yesterday in their machine.

Mrs. W. J. Thompson of Gaylord was here over Sunday visiting her sister Mrs. Carl Mork.

Mr. and Mrs. George Sorenson and baby left Monday for a short visit with friends in Detroit.

A dance will be given at the Opera house, Friday, August 30, by some of the boys of this town.

Miss Anna Jensen left for Milwaukee last week to visit relatives; the length of her stay is indefinite.

New and second hand single and double buggies for sale.

W. L. LANGFORD.

Miss Mildred Bunting who was visiting friends and relatives in Detroit returned home last Monday.

Miss Metha Hatch, who has been visiting her relatives at Hillsdale returned home Saturday last.

Mrs. Wm. Mansfield, of Detroit, is now visiting at the home of her uncles Paul and Robert Ziebell.

Mrs. W. J. Thompson, of Gaylord who was visiting with her sister Mrs. Carl Mork left Tuesday for Caro.

Mrs. Vanleet who has been visiting her relatives Mr. and Mrs. Wingard, returned to her home last Friday.

Mr. and Mrs. A. H. Wetzel of Dayton are visiting relatives in the village and are the guests of Mrs. A. B. Failing.

Mr. and Mrs. D. S. Cole of Caro who has been visiting their daughter Mrs. Carl Mork returned home Tuesday.

Mrs. Dutcher and children, of Lewiston, who were visiting at home of Mr. Armstrong, left today for Bay City.

Mr. and Mrs. Harland Horn of Sunfield, were guests of Mr. and Mrs. Claude Gilson the latter part of the week.

Miss Maggie Parker who was visiting in Lovell's came here yesterday and will return to her home in Lansing today.

Miss Bertha Johnson who was visiting her friend, Miss Frida Olsen, returned to her home at Cadillac last Friday.

Those who attend the play of "The House of a Thousand Candles" at the Opera house, Saturday, will not be disappointed.

Miss Luc Shell of Gaylord, who has been visiting Mr. and Mrs. Robert Ebel in their new home here returned home Sunday.

Mrs. Crowley returned last week from her trip to Grand Rapids where she purchased from Carl Knott & Co. a new stock of goods.

J. Lee Morford of Gaylord who is the republican candidate for representative of Presque Isle district was a caller in our town last week.

Fred Haven, instructor in the Lewis Institute, of Chicago, with his wife and baby are visiting his parents Mr. and Mrs. Wright Haven.

Taylor-made garments in all the latest styles at moderate prices. Guaranteed fit and workmanship.

716mo. A. E. Hendrickson.

A towel shower was given in honor of Miss Clara Peterson last night at the home of Miss Anna Nelson, about ten of her friends being present. A very pleasant evening was spent in sewing, darning, and towels, each one having to sew one towel and one towel after they all had finished very dainty refreshments were served.

Copies of a book, "The Potato" published by the New York Central railroad company has been sent to L. B. Merrill and Hugo Schrieber Jr. and are for the use of the farmers in this county. Those wishing to have the pleasure of reading the book may apply for the loan of the above copies from the gentlemen named above.

Clyde Humis home from Ann Arbor. Harry Connine arrived home last Friday.

Miss Emma Nelson arrived home from California Tuesday.

Games are scheduled with the Otsego for Sunday and Monday.

Miss Maude Tetu, nurse at Mercy hospital is on the sick list.

Miss Florence Smith left Wednesday for a short visit with her friends in Bay City.

A ten pound baby girl was born to Mr. and Mrs. Walter Hanson Sunday morning.

Mr. Ray Talit who has been visiting friends here left for Bay City Sunday night.

The Messes Vera and Cornelia Dutcher of Lewiston are visiting their cousin Fern Armstrong.

A Schjotz and family will leave for Detroit Saturday, where Mr. Schjotz is going into the bakery business.

Alfred Olsen is slowly recovering from injuries received when he was thrown from his auto last week.

For Sale—Span of horses—\$150.00. Fight east of Fredric.

8-29-4w. BENJ. SHERMAN.

Shirley Dyer, a former employee of this office, but now of Alger visited his mother and other relatives here yesterday.

Nice broilers running from 40 to 75c each dressed or alive, if ordered on Friday or before 9 a. m. Saturday. Phone 864. BARNY KROPP.

Miss Signa Eilersen leaves tomorrow for Mio where she expects to teach. Her place at this office will be filled by Miss Noley Sheehy.

Miss Lottie Sias returned last week from her visit to Midland. She was also in Detroit where she purchased a new stock of fall and winter goods.

Mr. and Mrs. Frank Jorgensen who was visiting Mr. Jorgensen's brother here, left Tuesday for Sailing where they will visit a few days with relatives.

Mr. Geo. McCullough who was on a short visit to Chicago returned last week, bringing with him his wife and daughter who had been there quite a while.

Perry Ostrander entertained Dewitt Harris, of Ingham county, last week. They were old chums and met for the first time after thirty-two years separation.

Bids will be received for delivery to the Sheriff of ten cords of dry 3 ft. wood, till Sept. 1, 1912.

JOHN J. NORDEN, County Clerk.

Mr. J. H. Wingard took a number of very fine and interesting pictures of the ball game Sunday, also some pictures of the players, these being now on sale at the studio. He has enlarged one picture of the players and the work is in every degree very fine. Mr. Wingard's work of enlarging can't be excelled anywhere, we believe.

A recent letter to Rev. and Mrs. J. H. Fleming, from Miss Josephine Russell, so long known as one of the efficient teachers of Grayling public schools, announces the recent death of her father, from an attack of pneumonia. Miss Russell is engaged to teach school for the coming year in her town, Silverwood, Mich.

On Saturday, August 31, at the Opera House, will appear "The House of a Thousand Candles." The play is dramatized by Geo. Middleton from the book by the same name. Mr. Primrose, the producer, has been able to make a cast worthy one with Mr. Helms as Bates and Miss Lynwood as Marion. The praxing element throughout this play is mystery, this making it very interesting. See it at the opera house next Saturday night.

I have bought a big line of swell toys for the holidays and the best line of ready-to-wear men's and children's clothing, ever brought to Grayling and also a swell line of ladies' and gents' furnishings and I thought them cheap enough so I can save the people of Crawford county a lot of money. Will be home now in a few days. Regards to all. HAPPY MIKE.

The fate of the old Populist party will be an interesting study to those who are now following off the Roosevelt party. Twenty years ago the Populist party cast a million votes, showed up in the electoral college with 22 votes, and elected a number of congressmen, a senator and a governor or two. It was a radical party—some what in line with the professions of the Roosevelt party, but it did not live and at the last "national convention" recently held but eight delegates were present. It is a melancholy spectacle which the bull moosers will do well to study.

Last Monday afternoon Mike Ross was standing upon the street and had his money out for some reason, when it is reported that one known as Frank Kitchen, slipped up and grabbed the currency, which amounted to \$17.27. Kitchen didn't tarry long to argue the right of ownership but started up the track toward the big mill, then through the lumber piles and out into the woods. One man who attempted to intercept him came near getting a bat over the eye so concluded to keep hands off. He was poorly clad and had no coat and the cold chilly night drove him in and he was discovered sometime during the following night asleep next to one of the trunks at the mill and was taken into custody. He still had about \$13.00 of the stolen money.

The bunch will play the Otsego here next Sunday and Monday.

Strayed—One gray mare from Forest View farm. Anyone seeing it please notify N. Nelson.

Mr. L. P. Olsen and family who were visiting friends at Detroit returned home last Tuesday.

Messrs. Sandy McKay, Ault, Duzenbury, and Sargent of West Branch were guests of Mr. and Mrs. Wm. McNevin over Sunday and attended the ball game.

Miss Bessie McCullough, who has been spending a few days with friends at Topinabee, one of our summer resorts, returned home last Monday and is again at work in the post office.

Lost—Sunday, July 28, a jewel case containing rings and other jewelry on road between Beaver Creek and Grayling. \$100 reward offered.

E. R. DICTON, Roscommon.

"The House of a Thousand Candles" will be played at the Opera house, Saturday, August 31st. The company comes highly recommended and will give a guaranteed high class performance. Get your seats early.

Wanted—Agents—Exclusive territory, for sale of much talked of household necessity. Big profits, easy seller. Write for free particulars. THE LAUREL SPECIALTY CO. SAGINAW, MICH.

I have a fine lot of ripe cucumbers, beets, bakas, carrots. Don't forget to order your cabbage, we have 5,000 heads ready for market. The new carnations will bloom in about 10 days from now. MARKET GARDEN.

The Development Bureau headquarters at Bay City are beginning to be pretty well filled with samples of fruits and grasses from various counties throughout the district. The basement in particular looks like a hay and grain field upside down. The samples are all tagged with the growers name and address.

We wish to extend our deepest thanks for all the sympathy and contributions of beautiful flowers received from our friends. We also wish to thank Mrs. John Billings, Mrs. Joe Cropp, Mrs. MacGuire Dupree and Mrs. Winslow and other kind friends and neighbors for all the help they have given us.

B. J. KROPP & FAMILY.

South Side

Mr. Wm. DeKett's are moving into their new home.

Mrs. Heroy Partlow is quite ill at time of this writing.

Mr. Skimpy who is now on his lecture tour returned last Tuesday at Dancub hall.

Mr. and Mrs. B. Chapple are entertaining relatives from southern part of the state.

Mr. and Mrs. J. Hienman of Detroit are visiting the latter's mother Mrs. Grant Shelenbarger.

Did you notice that large smile on John Morrissey's face. It's all caused by a 9 lb. girl who came to their house Aug. 27th.

Mrs. Frank Bondie returned to her home at Iron Mountain Wis. Monday after several weeks visiting relatives here and helping to care for her husband who is here for his health.

There was a large party of friends made lively at the home of Mrs. Arthur it being her daughters Misses Jennie and Lizzie's birthdays. All enjoyed a fine time and wish them many happy returns of the day.

HOME COMING AND FIELD DAY AT FREDRIC.

Next Friday and Saturday, Aug. 30 and 31, 1912.

The following program will be given on Friday:

Music by Band.

10:00 a. m.—Street Parade. 1st prize \$5.00; 2nd \$3.00.

Music by the Band.

11:00 a. m.—Wheelbarrow Race. 1st prize \$1.00; 2nd 50c.

11:30 a. m.—Fat Man's Race. 1st prize \$1.00; 2nd 50c.

AFTERNOON.

Music.

1:00 p. m.—Ball Game—Grayling vs. East Jordan.

Music by the Band.

3:00—Horse Race. 1st prize \$5.00; 2nd \$2.00. (One Heat)

4:00 p. m.—Balloon ascension.

Dance in the Evening.

The following is the program for Saturday:

MORNING.

Music.

10:00 a. m.—Girl's Foot Race. 1st prize \$1.00; 2nd 50c.

10:30—Boy's Foot Race. 1st prize \$1.00; 2nd 50c.

11:30—Grease Pig. Prize—the Pig.

AFTERNOON.

Music.

1:00 p. m.—Climbing—Greased Pole. Prize \$1.00.

1:30—Potato Race. Prize \$1.00.

2:00 p. m.—200 Yard Dash. 1st prize \$1.00; 2nd 50c.

Foot Race—Pat. Burke, A. Jendron, L. D. Gardener, and George Parker. Foot race bet of \$5.00.

3:00 p. m.—Ball Game—Waters vs. Blue Lake.

4:00 p. m.—Tug of War—Waters vs. Blue Lake. Prize \$5.00.

6:00—Balloon Ascension.

Dance.

Everybody welcome.

# Sweater Coats!

Just the thing for these cool days and evenings. Our stock is now complete in Men's, Women's and Children's Sweater Coats, Shawl Collar and high-button neck. Prices range from 50 cents to \$6.00.

## MEN'S FALL HATS—

They are here, the new shapes in stiff and soft hats.

## NEW FALL SHOES FOR Men—

In Tans and Blacks in Button or Lace.

SEE WINDOWS FOR NEW STYLES

# GRAYLING MERCANTILE COMPANY

The Quality Store

### Church Notes

M. E. church. Public service subject.

"The Necessity of Faith in Christ as a means of Salvation." Epworth League subject, "Epworth League Rally day." "The First Preaching Tour." "The Nobility of Youthful Enthusiasm." Leader, Miss Cornelia Mollstrup. Public service subject.

"God's Desire to save."

JAMES IVEY, Pastor.

Presbyterian church. Morning.

Theme: "The Church and the Labor Question. A Vital Problem of Today." Evening service topic, "The Pilgrim's Psalm." J. HARRISON, Pastor.

Minister.

A vast amount of ill health is due to

impaired digestion. When the stomach fails to perform its functions properly the whole system becomes deranged. A few doses of Chamberlain's Tablets is all you need. They will strengthen your digestion, invigorate your liver, and regulate your bowels, entirely doing away with that miserable feeling due to faulty digestion. Try it. Many others have been permanently cured. Why not you?

For sale by all dealers.

Free! Free!

In order to advertise our Model Bread in a thoroughly UP-TO-DATE manner, we have purchased a quantity of handsome

Fancy Berry Spoons

made by S. L. & G. H. Rogers and stamped with their name, which in itself is a guarantee of the quality.

For 100 days, beginning next Monday, we are going to place a new bright Aluminum check in one loaf of home-baked bread each day, and to the finder of this check we are going to make a present of one of these beautiful Berry Spoons.

Customer who has received one Rogers-Berry Spoon, and finds a second check, is to help along by giving it to some person who is not using "Model" Bread.

MODEL BAKERY

WE SELL

AND

GUARANTEE

Finest in the World

BRINK'S GROCERY

Where QUALITY, weight and measure are Guaranteed.

Everything that's found in a first-class Market.

Clean and sanitary. First Class Meats, that are tender and appetizing

OUR SERVICE IS FIRST CLASS

RIDE A GOOD BIKE

Coaster-Break-FREE for Balance of Season.

AVALANCHE OFFICE.

# Kitchen Cabinet

## Sale!

For two weeks

Beginning Friday August 30, we will sell any Kitchen Cabinet at a special price. The biggest values we have ever offered will be shown on the floor during this sale.

The New McDougal

is included. Compare it critically, if you wish, point for point, with any other; you will quickly see that it stands head and shoulder above them all.

You need a cabinet, be one of the first, they are all good values that will please you.

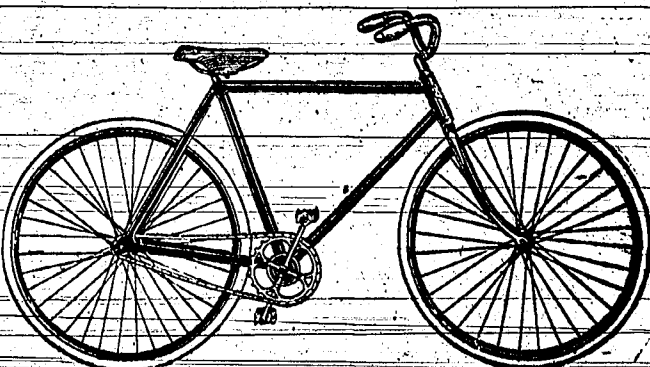
# Sorenson Bros.

Wingold PATENT FLOUR

Finest in the World

BRINK'S GROCERY

Where QUALITY, weight and measure are Guaranteed.



RIDE A GOOD BIKE

Coaster-Break-FREE for Balance of Season. AVALANCHE OFFICE.






1944. Norbald had entered the room

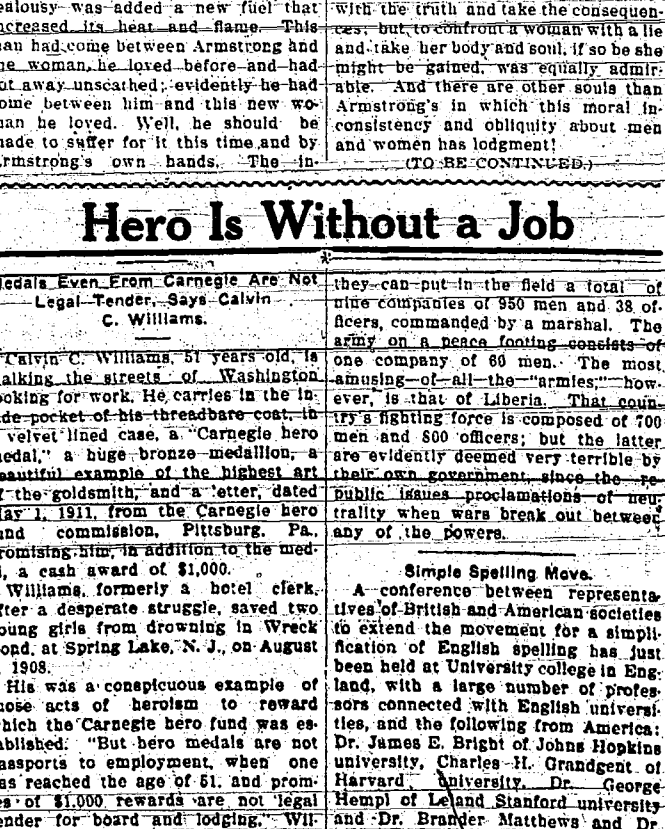
Armstrong had thrifted to leap upon him, and he meant to do it. One or the other of them, he swore in his heart, should never leave that room alive.

But Newbold should have his chance. Armstrong was as brave, as fearless, as intrepid as any man on earth. There was much that was admirable in his character; he would not take any man at a disadvantage in an encounter such as he proposed. He would not hesitate to ob a man of his size if he could, and he would not shrink from any deceit necessary to obtain his purpose with a woman for good or evil, but he had his own ideas of honor, he would not shoot an enemy in the back for instance.

Singular perversion, this, to which



五、



regret to tell you that our little company can do little against the fa-

Chance for One-Armed Man.

"I'm looking for a one-armed man," said the patron of a New York restaurant. "If you know of a man who has only a right hand I can make him a good business proposition—one that will save him a lot of good dollars and give me the same amount. His right hand, however, must be a No. 7 1/2."

"It's this way: Several months ago I sprained my ankle and for many months was obliged to lean heavily on cane. To protect my left hand I wore a glove on that hand but did not wear one on the right. The result was that I wore out dozens of left gloves, but the right hand ones I never lost, on."

More often it is the man who gets justice than that wicked.

Water in bluing is adulteration. Glass and water makes liquid blue costly. Buy Rod Cross Ball Blue, makes clothes whiter than snow.

A woman's mind is continually running to clothes. If she isn't talking through her hat she's laughing in her sleeve.

**CURES ITCHING SKIN DISEASES.**  
Cels's Carbolic Soap stops itching and makes the skin smooth. All Druggists. 25 and 50c.

**Patriotism.**  
Marks—So your Italian barber refused to shave you. Why was that?  
Parks—I told him I'd just had a Turkish bath.

The woman who cares for a clean, wholesome mouth, and sweet breath, will find Paxtine Antiseptic a joy forever. At druggists, 25c a box or sent postpaid on receipt of price by The Paxton Toilet Co., Boston, Mass.

**Envious, Fernape:**  
"I'm afraid our friend Scrapiey is Socialist."  
"No. You misjudge Scrapiey. What makes him sore is the fact that in spite of the high cost of living, someone manages to lead double lives."

**Important to Mothers.**  
Examine carefully every bottle of CASTORIA, a safe and sure remedy for children and children, and see that it bears the signature of *Charles H. Fletcher* in Use For Over 30 Years.  
Children Cry for Fletcher's Castoria

**No Concerns.**  
"Mr. Mink must be a singularly pure and upright man."  
"Why do you think he is unusually so?"  
"Somebody told him there were defunct reports that a Burns detective had been operating secretly in the neighborhood he frequents, and he said it was nothing to him."

**Opening Up Lhasa.**  
Lhasa, which is the capital of Tibet, for generations was known as the Forbidden City, because of its political and religious exclusiveness. In 1901 a British armed expedition opened the mysterious old city. Previous to that time practically every European traveler had been stopped by the monks to reach the place. The population in Lhasa is about 35,000.

**A Word to the Wise.**  
The proverbial advice, "Cobler, stick to your last," had an opposite exemplification in the following anecdote, for which Zion's Advocate is responsible.  
A colored man was brought before a police judge charged with stealing a pair of shoes. He pleaded guilty, and received sentence, when the judge asked how it was he managed to lift those shoes right under the window of his owners house when there was a sign in the door.  
"It wouldn't be of no use, judge," said the culprit, "to try to explain this like as you tell me. If you was to try to lift a spoor, an git no chickens, neither. If you want to engage in any casually, judge, yo' better stick to a bench, when yo' am familiar."

**Barber Shops in China.**  
Since the Chinese revolution a great many Chinese have had their eyes cut out, and this has led to the opening of a large number of barber shops throughout the far east where Chinese are feared, says an exchange.  
Several progressive business men of Shanghai, anticipating this, imported a large number of American barber chairs, and they are now unable to get supplies quickly enough. It has so been learned that the Chinese insist on having American hair clippers, and refuse all other makes offered. It would seem that American manufacturers of barbers' supplies should experience a large increase in their dental trade.

**The Cannibals Need Food.**  
An officer of the French colonial army brought a letter from the chief of a group of missionaries in the southern islands of the Pacific not long ago, which reads up as follows:  
"I regret to tell you that our little company can do little against the fatalisticism of these poor wretches. Moreover, famine is ravaging the country, for the harvest has been destroyed. Therefore the dispatch of our missionaries has become urgent." La Petite Republique.

**The Natural Inference.**  
While out motoring the other day, I ran across an old friend of mine.  
"Was he much hurt?"  
"Comparative Possession," I have an abstract theory.  
"That's nothing. I've got a concrete plan."

**A Large Package**

Of Enjoyment—

**Post Toasties**

Served with cream, milk or fruit—fresh or cooked.

Crisp, golden-brown bits of white corn—delicious and wholesome—

A flavour that appeals to young and old.

**"The Memory Lingers"**

Sold by Grocers.

Postum Cereal Co., Inc., BOSTON, MASS.



## CHARACTERISTICS OF IDEAL FEEDER STEER



A Profitable Bunch.

One of the first things I look for in a steer bought for a feeder is a loose, pliable, mellow skin, with a thick cover of thrifty-looking hair. If the other points of the steer are satisfactory, these indicate an animal that can turn corn into good beef at a relatively small cost.

In buying feeders in stock pens or at auction sales, look for the short neck, short legs, deep body and straight back, says a writer in the Farm Progress. Of course, I do not expect smoothness in a feeder steer, but neither do I want high thigh bones and a general appearance of coarseness.

Try to imagine how the steer will look when fat and ready for the market. If his neck is thin, will it become thicker? If the back is thin, is there still thickness enough to carry the load of fat that you hope to put there?

It does not matter much whether the feeder steer is an animal in which Angus or Galloway, Hereford or Shorthorn blood predominates. They are all breeds in which the same purpose has been kept in mind. They are all well fleeced, early maturing stock, with a capacity of turning large amounts of feed into good red beef at a low cost.

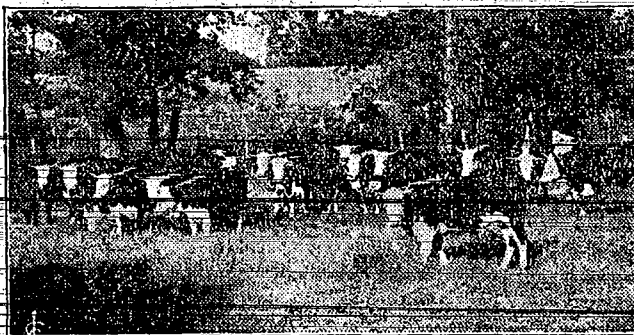
When I buy a feeder steer I look for an animal with a short, broad head, large muzzle, heavy, strong jaw, smooth, strong shoulders and a wide, deep chest. I want no disturbances in a herd that I am feeding, so I keep away from the wild and quarrelsome sort as near as I can. Of course, when buying in car load or half car load lots you have to take the disposition for granted.

The chest should be wide, especially at the bottom, and the body big enough to give storage room to the corn and the roughage that you are going to put in this machine that it is to turn it into beef. The more nearly the feeder steer approaches the general type of the fat beef steer, the more he is worth to the man who buys and the man who sells him.

For a good many years I have been buying feeder steers shipped into a stockyard, shipping them about eighty miles and finishing them on corn and roughage. Most of them are western cattle. They are a little slow in starting to take on weight, but fatten very rapidly a little later in their feeding. It is better to buy them by carload lots in order to save money on the yardage, the commission and the freight. A carload of such steers will run from eighteen to twenty-two head.

The change in the steer during the finishing period is remarkable. Where the heavy muscles are noticeable fat layers will appear, giving smoothness to form. The rump, the back, the neck and the shoulder points will broaden and round out.

The feeder steer is valuable to the man with ready money for his purchase, and the feed necessary for his finishing up into a fat steer. If you are able to turn him into an animal that will yield a minimum of waste and a maximum of carcass, you have an animal that will make the feeding of corn that costs as high as 80 cents a bushel profitable.



Hereford Steers.

## TRAINING TREE FOR ANY SHAPE DESIRED

Care Should Be Exercised to Keep Top Open to Admit Rays of Sun.

It is much better to train a tree the shape it is wanted than allow it to grow wild, then chop and saw it into the desired shape, says the Mirror and Farmer.

If sprouts starting from the body of the tree or along the main branches are plucked when they are three or four inches long they will ordinarily form fruit spurs. Aim to get more fruit buds near the body of the tree and along the larger limbs instead of the branches.

As color is an important factor, care should be exercised to keep the top open so that the rays of the sun can reach to every part at some portion of the day. To accomplish this, it may be well to do some pruning when the tree is in full leaf, cutting 10 or even 15 per cent of the top away when the tree is in full leaf.

The tree is in full leaf will cause no serious injury. If the tree is carefully looked over about three times during the growing season, and the ends of those spots that are growing too long are pinched off, the tree may be kept to the desired shape. But where a shoot has been overlooked it is better to cut it out when found than wait until winter.

Negligence during the growing season is about the only logical reason for severe winter pruning. Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

## PROPER FEEDING OF MOULTING CHICKENS

Care Should Be Exercised to Keep Top Open to Admit Rays of Sun.

It is much better to train a tree the shape it is wanted than allow it to grow wild, then chop and saw it into the desired shape, says the Mirror and Farmer.

If sprouts starting from the body of the tree or along the main branches are plucked when they are three or four inches long they will ordinarily form fruit spurs. Aim to get more fruit buds near the body of the tree and along the larger limbs instead of the branches.

As color is an important factor, care should be exercised to keep the top open so that the rays of the sun can reach to every part at some portion of the day. To accomplish this, it may be well to do some pruning when the tree is in full leaf, cutting 10 or even 15 per cent of the top away when the tree is in full leaf.

The tree is in full leaf will cause no serious injury. If the tree is carefully looked over about three times during the growing season, and the ends of those spots that are growing too long are pinched off, the tree may be kept to the desired shape. But where a shoot has been overlooked it is better to cut it out when found than wait until winter.

Negligence during the growing season is about the only logical reason for severe winter pruning. Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

Severe pruning while the tree is in a dormant state stimulates more rapid and abundant wood growth, about four-fifths of which will grow where it is not wanted, necessitating yet more cutting the following season. Pinching the summer pruning stimulates the production of fruit buds, and tends toward better maturity of both buds and fruit. Plan to grow an abundance of fruit spurs well distributed over the whole tree.

## BOYS' STATE FAIR SCHOOL

Also the Miniature Model Farms Are a Big Feature at the Michigan State Fair.

(By J. E. Hannon, Secretary and Manager Michigan State Fair).

Two weeks from next Monday the Michigan State Fair opens its gates to the public for the 23rd time and I believe firmly that this will be the greatest State Fair ever known, not only in Michigan but in the United States. At this fair the public will have the opportunity to pass judgment on one of the greatest questions that has ever been presented to the American public. What will the public do in these United States when the increase in population has overtaken the grub rate? Here we have a question that must be settled and that idea in mind the Michigan State Fair prepared to educate the minds of the boys of the state in scientific agriculture and the fair intends to follow up the lead of this year with other things another year, also continuing the Boys' State Fair School and the Miniature Model Farms, the former for country boys and the latter for the city boys. We propose to educate the young, to show them that in agriculture they are undertaking a business which is just as honorable as working in a city. We propose to wipe out that old-time feeling, which exists today to some degree, that the country boy is a rube with the hayseed sticking out all over him, uncouth and unsophisticated. The boys of today are men who pass in the city the people of the city and who is there who will tell the man from the farm apart from the man from the city? Farming is not what it used to be, for science has stepped in and today our farmers are as well equipped as any business man in the city. They have a free mail delivery and daily paper, and he is the one to be envied above the man held tight to the city. The people of the city are trying to get out into the country and we must do all possible to check this exodus of the boys and girls of the country to the large cities. The time is fast approaching when it will be necessary to look to other countries for the food stuffs unless steps are taken to farm our own country and the boys and the girls must be taught that in farming they have a chance of making money. Do not come to them in the city. The public must depend upon the farmer to produce the necessities of life and we of the Michigan State Fair believe that a great amount of good will result from our efforts this year.

Big Drop in Fruit Shipments. Traffic agents of the Pere Marquette railroad report that Michigan growers along its lines will ship by freight over this system about 1,600 carloads of fruit within the next six or eight weeks.

These figures, to a certain extent, illustrate the effect of the unusually adverse winter in Michigan orchards, as well as the resultant traffic of fruit. The Michigan fruit crop is barely a third of the tonnage of 1911, which year produced an abnormally bountiful crop. The Pere Marquette carried over 40 per cent of the fruit which was loaded by rail in 1911.

This year's crop of carloads of apples and 50 carloads of peaches will originate from Lansing. The Pent-water district will yield 115 carloads of apples and peaches. Muskegon and White Cloud district, 60 carloads of peaches and apples and Grand Rapids and White Cloud territory a similar amount.

Three hundred and fifty carloads of peaches, apples and grapes are expected from the Grand Rapids-Benton Harbor section. The Buchanan vineyards along 15 miles of the line, will yield 200 carloads of grapes, while the Benton Harbor and New Buffalo section will yield 600 carloads.

Jealous Man Shoots Lover. In a fit of jealous rage Frank Bliss, aged 73, shot and perhaps fatally wounded Edward Willette in Muskegon in the presence of Bessie Stoddard, aged 20, whom Willette was to have married.

Despite the fact Willette was shot just below the heart he leaped on his aged assailant and overpowered him, taking the revolver from him. He held the enraged man until the police arrived and was then removed to a hospital.

Bliss, who is a farmer, formerly employed the girl as housekeeper. He apparently lost his reason when the girl left his home to wed her lover. It is believed Bliss intended the shot for the girl, but hit Willette, who was shielding her.

Grand Rapids Bank Was Heavy Loser. The Old National bank of Grand Rapids lost about \$35,000 in the collapse of the American Electric Power Co. of Muskegon, according to the testimony of Cashier George F. McKenzie, in the case of Charles L. Johnson, the former Chicago banker, who is now charged with conspiracy with Frank G. Jones, the active head of the line company, to secure money under false pretenses.

Mr. McKenzie declared that the Muskegon concern carried a line of \$30,000 direct credit and about \$5,000 representing indirect credit when the failure came.

Henry A. Bacheler, a pioneer lumberman of Saginaw, died after a long illness from a complication of diseases.

State to Stand Pat in Kalamazoo Tax Case. The state tax commission is sure to stand pat on its assessment of the Kalamazoo properties, which is meeting serious opposition on the part of the taxpayers, according to the testimony in the tax commission of late.

They say it has long been known that Kalamazoo was one of the "most under-assessed communities in the state." Conditions there, according to the reports of the experts on the work, show that the assessments have been grossly unfair to the small property owners.

Sam Schepps Is Given Immunity. Sam Schepps has been promised full immunity in the Rosenthal case in New York. Before testifying before the grand jury, where he furnished corroborative to the confession of "Red Jack" Rosenthal, implicating Police Lieutenant Becker in the killing of Rosenthal, Schepps obtained a written agreement from the district attorney's office that he was not to be indicted.

General William Booth, commander-in-chief of the Salvation Army is dead.

## Social Forms and Entertainments



From a Young Girl.

I have been reading your column quite awhile and now I come to you for help. I am a girl fifteen years old, and would like you to tell me how should I treat a boy who likes me much, and I don't care anything for him.

Is it proper for a girl to kiss a young boy that is older than she, after he has been off for three years? Do you think I write well. From an Interested Reader.

You have a difficult task, but if the boy has any sense at all, after you have declined his invitations several times he will see that you do not care for his attention. I do not think you need kiss the young man even if he has been absent a long time. He is not a relative, and has no reason for claiming kisses. Your writing may be greatly improved by careful practice. It is not good for one of your age.

Written Wedding Invitations. In writing a wedding invitation to the few guests who are to witness a ceremony to be performed at home, is the same form observed as those engraved, or are informal notes sent? Perplexed.

Do not try to copy the formal style, but write an individual note to each guest. One of the prettiest home wedding I know of was where the bride wrote little missives something like this: "I like and I am to be married on Saturday at noon, and it will add greatly to our happiness if you witness the ceremony. Hoping to have you with us cordially, your etc."

The Proper Thing to Do. This may seem a most trivial and even foolish state of mind to be in, but I believe you will be kind enough to aid me. For many long years I was barred from all social pleasures by a series of illnesses. Now that I am well and can again enter society I find I am too self-conscious to enjoy a single moment. I do not know what to say or how to act. What shall I do? Can you give me any set phrases to learn to repeat on all occasions? Anything you suggest I will be grateful for. M.V.H.

In the first place, endeavor to forget yourself. This will mean that you should be depressed for you have been so accustomed to thinking of yourself and your surroundings. If possible, become engaged in some active work for others. When you enter a room do not let the thought come, "what do they think of me," but what can I see or do or say to make the other fellow comfortable and happy? You will find this habit will grow, too, and you will soon be perfectly at ease.

Reply to "Mary." Your questions do not belong in our department, as I cannot take space to reply. Sorry.

The Proper Calling Cards. Please inform me which is the proper way for a wife to have her calling cards printed. Should the husband's initials be used, his full Christian name (if a long one), or the wife's Christian name? Should the name be printed or written? Nell.

A visiting card should bear the husband's full name or his first name and middle initial, and they should be written if you cannot afford to have them engraved, not printed.

From a Fair Hostess. I want to give a party in the fall, and want to invite some boys and girls from the country. As it will not be a house party, do I have to invite them to stay with me—especially the boys. Hoping to see this in print at your very earliest convenience. An Interested Reader.

It is not necessary for you to ask the boys to be house guests; they should look out for themselves at a house of course girls could not go to a public place unchaperoned.

MADAME MERCI. Dancing Frocks. Dancing frocks will come in for a great share of attention this summer, and while young girls will revel in those elegant simplifications of exquisite lace and old world taffetas which are so cleverly blended into the artistic modes for evening wear, young matrons will lean toward the clever frocks which veil the more brilliant silks and satins of their foundation.

The range of colorings is greater than ever, and the gradient hues of one particular color provides variety in plenty. It is possible to go through the whole gamut of one particular favorite hue and yet have frocks individual enough for a score of festive occasions.

Then, after exhausting the possibilities of a really inexhaustible range, there are all the combinations of color harmonies to be considered.

Jeweled Ornaments. The favorite jewelry ornament and the one that is above all beautiful is undoubtedly the pearl necklace, either long or short. The low cut corsage favors the return of this prettiest of fashions and makes the old world liking for the narrow black velvet choker apparent once more. The black velvet and the pearls agree, the velvet enhances the beauty of the pearls and at the same time throwing into relief the whiteness of the throat.

Comfortable Style. The transparent gulleps with long sleeves furnishes a very comfortable way out of wearing long gloves with the short sleeved frock of silk or heavy linen.

Most often, perhaps, it is in chiton or not or other sheer stuff echoing the color of the frock; but one sees it, too, in sheer white or cream lingerie material associated with a jumper blouse of darker coloring.

The Ear-Marks. Hans was summoned to court to identify a stolen hog. On being asked: "If the hog had any ear-marks, he replied: "The only ear-marks that I saw was that his tail was cut off."

Woman's First Industrial Venture. It was in the manufacture of toilet articles that woman first appeared in industry outside of the home.

Egotism. The egotist morosely thinks publicly what other men think in secret.

## Health & Beauty Hints



By Katherine Morton.

Invitations for October weddings are beginning to fly, and so also are letters to beauty specialists. They are mostly from engaged girls and bridesmaids, pretty pleas for "balm," or "pastes," or advice. Two of the future brides complain of being "warm out" and pale and nervous—that is, two who write to me, and here are patients for that cheapest of medicine and that most rewarding of beauty moves—common sense.

Being engaged is in itself a thrilling experience, trying to the nerves, temper and mere muscles. If the girl does much running around, and if she stays at home, and is entirely occupied with the subject of Jack or John and her own importance, she is apt to get not only pale, but extremely below par in physical fitness. Love is the most consuming emotion of which the human heart is capable, and too much occupation with the subject is far from wise now when two people expect to join their destinies so soon for all time. Therefore, as a first specific to ward the relief of that "tired feeling," and as a cure for indifferent complexion, I would advise the bride-to-be to have more long walks with her "young man" and fewer indoor conferences. Fresh air is the skin's great rest-giver and the exercise freshens the blood, tones up muscles and brings joy to the heart; but since young people always want to drink cold things, even after long walks, I must warn the bride-to-be against a heavy complexion on her wedding day to steer clear of the ice cream sodas taken so often during the ramble with the beloved one and with girl friends.

Butterfly skin is a bad thing, many times used internally and externally is very beautifying to the skin, and sometimes an entire butterfly diet is needed for toning up the stomach after purging or a bilious attack. Moisturize the skin, dark kind is considered to have a distinct beauty value when eaten with coarse bread, and so are the fresh fruits, particularly oranges, grapefruit, grapes and pineapple. A daily salad of fresh green stuff aids the digestion and so is a help in the banishing of pimples and the self-consciousness due to coarse eating or neglect of the bowels.

Weddings coming in October entail a good deal more anxiety about the skin than those that take place in the springtime, for vacations have just ended and many girls return to town disfigured and the alarming return with sunburn and freckles. For the removal of these blights massage is needed, but it must follow a hot face bath or a good face steam and be done with a pinching cream. The cream containing cucumber, lettuce or iris are all whitening in their effect, but much of the success with their use comes with the massage. The rubbing gets down to the seat of things, the pores opening and allowing the unguent used to penetrate below the first layer of skin.

A cucumber milk, which is almost a specific for redness, roughness and sunburn, and which is very helpful in the banishment of freckles, is made in this manner:

One cup of sweet almonds ..... 4 ounces  
Fresh cucumber juice ..... 10 ounces  
Essence of cucumber ..... 2 ounces  
White-castile soap, powdered ..... 1 ounce  
Tincture of Benzoin ..... 2-3 drops

The cucumber juice is obtained by boiling the vegetables in a very little water. Slice them thin; skin and all, and let them cook slowly till soft and mushy; strain twice through cloth. The essence is made by putting an ounce and a half of the cucumber juice into the same quantity of high proof alcohol. Put the essence and the sugar in quite a large bottle so the mixture requires much shaking. After a few hours the soap will be dissolved, when it is time to add the cucumber juice, shake the bottle till these ingredients are thoroughly mixed; then pour out into a crockery bowl and add the oil and benzoin, stirring constantly until there is a creamy liquid. Put the emulsion into small bottles, cork tightly and keep in the dark. Always shake the bottle before using the emulsion.

This milk can be employed instead of the cream for the massage and at the same time it will act as an excellent cleanser.

The New Hat Tilt. If you wish to be fashionable, mesdames, wear your hat on a gentle slope touching the right eyebrow and, if you can, not to look rakish, but quite seriously come it faint. If you like, and if the gods or your hairdresser have seen fit to provide you with hair in twists and coils at the back, you may reveal the front; if not, take the public into your confidence about it. But out of doors you must conceal the fact that there is any hair on top or wandering in waves or kinks curls over your forehead. Not a strand of hair should show in front— which is all very well so long as the hat is on, but if we follow the fashion, pretty slight, we shall all look as soon as our hats are removed. One can foresee a revival of the great theater hat difficulty.

Comfortable Style. The transparent gulleps with long sleeves furnishes a very comfortable way out of wearing long gloves with the short sleeved frock of silk or heavy linen.

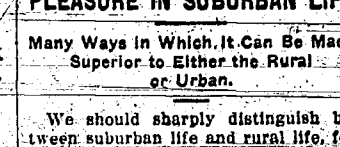
Most often, perhaps, it is in chiton or not or other sheer stuff echoing the color of the frock; but one sees it, too, in sheer white or cream lingerie material associated with a jumper blouse of darker coloring.

The Ear-Marks. Hans was summoned to court to identify a stolen hog. On being asked: "If the hog had any ear-marks, he replied: "The only ear-marks that I saw was that his tail was cut off."

Woman's First Industrial Venture. It was in the manufacture of toilet articles that woman first appeared in industry outside of the home.

Egotism. The egotist morosely thinks publicly what other men think in secret.

## Home Town Helps



PLEASURE IN SUBURBAN LIFE

Many Ways in Which It Can Be Made Superior to Either the Rural or Urban.

We should sharply distinguish between suburban life and rural life, for a vast gap separates them, especially for the gentler sex. Too often in strictly rural life woman's time is wholly occupied in drudgery, to the exclusion of all social life, a considerable distance from nearest neighbors and their equally manifold duties conspiring to prevent—a supposed waste of time in "visiting."

While all this is changing for the better, such conditions were never true of ordinary suburban life. Even the farmer's wife may now chat with her friends and neighbors over the telephone, and rural delivery places come closely in touch with the world's movements and brings small articles of merchandise right to her door nearly as quickly as it is delivered to her city sisters. Suburban life consists of living in rather thickly settled communities, generally without the confines of municipalities, yet having, usually, all the city's advantages of transportation, water service, telephone, gas, electricity, daily papers delivered a few hours after publication, together with many valuable up-to-date conveniences.

Every such community should have a live improvement association, and perhaps, in addition, an equally live "woman's club." Such clubs may purchase magazines for either individual or collective use at greatly reduced rates, and would they but voluntarily co-operate, all household commodities at equally advantageous prices. Co-operation, zealously and honestly carried out, spells success for any organization or business enterprise.

Some Important Points to Be Considered Before the Road is Laid Out.

It must be apparent to all that the chief point of value in a street lies in its general appearance, for if it be not attractive the street were better bare, though there be but a few trees having no ornamental value for street planting. Nevertheless, we desire the most ornate, and this must be the consideration.

The next most important point is its drought resistance. We may be able to care for a tree much or all of the time, but we would be relieved of the possible danger arising from the loss of the tree. These trees which look best with least care and water will prove the only ones generally useful for while one will give ample care, his neighbor will give none.

The next point must be cleanliness; for if a tree be too dirty its litter will detract from the beauty and tidiness of the street sufficiently to offset any attractive appearance of the tree itself.

Fourth on the list must come amount of care, a consideration close allied to the last.

Next comes rapidity of growth. Not until we are many centuries older will we settle down to the philosophic state of mind enjoyed by Europeans. We wish a tree to make "a fair showing" in a year, not knowing that the most rapid-growing trees are generally the shortest-lived. We should learn to plant for posterity—for generations to come—as they do in all countries but ours.

Sixth, and last, a tree should have a good root system.

Summer Stops the Swing. If you exert a pound of pressure against a nut it is a swing you'll start him moving slowly "to and fro." If you continue to exert a pound of pressure against him every time the swing makes a trip you'll soon have him going so high that he almost turns the whole circle. If you stop pushing the momentum will die out and the swing comes to rest at dead center.

Winning trade follows the same natural laws.

Advertisements are the force behind the swing of public favor. Each new advertisement increases the momentum. Finally the accumulated force of these advertisements impels swings indifference to the buying point.

If you stop advertising your loss momentum.

The moral of which is: Don't stop the business swing in summer. Keep adding the pounds of advertising pressure.

People Known by Their Homes. Experienced travelers are related when they come across well-planted, and well-cared for, homes tastefully planted. They instinctively feel a desire to know the occupants, feeling sure they will find within people of intelligence, education, nobleness, generosity and affability. All know then, that the cultivation of plants and flowers is indicative of high ideals and character, even though he has never thought closely along these lines. It has truly been said that "the exterior of a home is an index to the character of the inhabitants." How will you be judged?

The Ear-Marks. Hans was summoned to court to identify a stolen hog. On being asked: "If the hog had any ear-marks, he replied: "The only ear-marks that I saw was that his tail was cut off."

Woman's First Industrial Venture. It was in the manufacture of toilet articles that woman first appeared in industry outside of the home.

Egotism. The egotist morosely thinks publicly what other men think in secret.

## CRITICAL TIME OF WOMAN'S LIFE

From 40 to 50 Years of Age. How It May Be Passed in Safety.



